



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,461	10/21/2002	Thomas Ferry	126800	4029
23413	7590	05/30/2006		
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			EXAMINER DUONG, FRANK	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,461

Applicant(s)

FERRY ET AL.

Examiner

Frank Duong

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-17 is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 8-14 is/are rejected.
- 7) ☒ Claim(s) 2 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is a response to communications dated 10/21/02. Claims 1-17 are pending in the application.

Information Disclosure Statement

2. The information disclosure statement filed 10/21/02 complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been considered and placed in the application file.

Specification

3. The disclosure is objected to because of the following informalities:

Page 13, "What is claim is:" should be deleted.

Page 18, "Figures" should be deleted.

Appropriate correction is required.

Claim Objections

4. Claims 1 and 13 are objected to because of the following informalities:

As per claim 1, line 5, "a first and a second timer" should read --a first timer and a second timer--.

As per claim 13:

Line 2, "adapted to" should be changed to --configured to--. The rationale for doing that is such term suggests or makes optional but does not require steps to be

performed, or by claim language that does not limit a claim to a particular structure.

See MPEP 2111.04 [R-3].

Line 4, "comprising;" should read --comprising:--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-6 and 8-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sheppard et al (USP 5,739,594) (hereinafter "Sheppard").

Regarding **claim 1**, in accordance with Sheppard reference entirety, Sheppard shows an automatic transfer switch (Fig. 1) comprising:

a housing (*not shown; it is inherent the device of Fig. 1 is contained in a housing or panel because of high voltage power sources*);

a switch (10) for switching electrical connection from a first external power source (SOURCE 1) to a second external power source (SOURCE 2) (*see Fig. 1 for connection details*);

a first timer (TIMER1 discussed at col. 5, line 57) and a second timer (TIMER2 discussed at col. 6, line 4) disposed within said housing (Fig. 1), said

first and second timers having first and second time delays, respectively (*duration of normal power being unavailable and duration of emergency power being available discussed at col. 5, lines 58-59 and col. 6, line 3, respectively*);

said switch (10) responsive to said first and second timers (*col. 6, lines 6-8, it is disclosed if emergency power is available, the emergency relay will be closed at 254 after TIMER2 has expired*); and

wherein said second time delay is nested within said first time delay (*Fig. 5B depicted TIMER2 occurs after TIMER1 and the looping of the process with the GOTO START block. Therefore, TIMER2 is nested in TIMER1*).

Regarding **claim 3**, in addition to features recited in base claim 1 (see rationales discussed above), Sheppard further shows a controller (100) disposed within said housing (*see Fig. 1*); wherein said switch and said first and second timers are responsive to said controller (*at col. 4, lines 64-67, it is disclosed the process of Figs. 5A-5C is a general operation of the controller 100*).

Regarding **claim 4**, in addition to features recited in base claim 3 (see rationales discussed above), Sheppard further shows a display (32) disposed on said housing for displaying a status of at least one of said switch, said first and second timers, said nested time delays, and an external power source (*Fig. 2 depicts the hardware configuration of the controller 100 to include display 32*).

Regarding **claim 5**, in addition to features recited in base claim 4 (see rationales discussed above), Sheppard further discloses wherein: said display (32) is responsive to said controller (*see Fig. 2*).

Regarding **claim 6**, in addition to features recited in base claim 3 (see rationales discussed above), Sheppard further discloses a control panel (34) disposed on said housing for inputting information to said controller (*see col. 3, lines 18-21 for description of user input device 34*).

Regarding **claim 8**, in addition to features recited in base claim 5 (see rationales discussed above), Sheppard further discloses an actuator (16) responsive to said controller; said switch responsive to said actuator; and wherein said actuator comprises an overcentering mechanism (relays) (*see col. 2, lines 49-51 and col. 3, lines 5-6*).

Regarding **claim 9**, in addition to features recited in base claim 8 (see rationales discussed above), Sheppard further discloses a drive system (relays) responsive to said controller; said actuator responsive to said drive system; and wherein said drive system is a high speed drive system (*col. 3, lines 5-16, it is disclosed relays provides means for energizing actuator 16 and relay control signal is provided from controller 100*).

Regarding **claim 10**, in addition to features recited in base claim 1 (see rationales discussed above), Sheppard further discloses wherein; said switch comprises electrical contacts, wherein said electrical contacts are high pressure contacts (*this limitation is common in an automatic transfer switch having high voltage sources*).

Regarding **claim 11**, in addition to features recited in base claim 1 (see rationales discussed above), Sheppard further discloses wherein; the beginning time of said second time delay is determined from the end time of said first time delay (*Fig. 5B depicts TIMER2 at step 248 begins after TIMER1 at step 242 expired*).

Regarding **claim 12**, in addition to features recited in base claim 5 (see rationales discussed above), Sheppard further discloses wherein; said second time delay is responsive to said controller; wherein said controller overrides the nesting of said second time delay nested within said first time delay (*Fig. 5B depicts CLEAR TIMER2 at YES fork of block 250 or NO fork of block 252*); and wherein said second time delay is arranged serial to said first time delay (*Fig. 5B depicts timer delays are serially arranged*).

Regarding **claim 13**, in accordance with Sheppard reference entirety, Sheppard shows an automatic transfer switch control system (Fig. 1) comprising:

an automatic transfer switch (Fig. 1) configured to switch (12) power service between a first power source (SOURCE 1) and a second power source (SOURCE 2), said automatic transfer switch (Fig. 1) comprising: a switch (10), a first timer (TIMER 1), a second timer (TIMER2), a controller (100), and a computer (32, 34, 36 and 100 or Fig. 2); said switch responsive to said first and second timers (*col. 3, lines 12-24 and elements 30, 20, 26, 16 and 18 depicts in Fig. 1*); said first and second timers responsive to said controller (*Fig. 5B and steps 240-254*); said controller responsive to said computer (Fig. 2); wherein said first and second timers have first and second time delays, respectively, and said second time delay being nested within said first time delay (*Fig. 5B depicted TIMER2 occurs after TIMER1 and the looping of the process with the GOTO START block. Therefore, TIMER2 is nested in TIMER1*).

Regarding **claim 14**, in addition to features recited in base claim 13 (see rationales discussed above), Sheppard further discloses wherein: said first timer has a

first parameter setting (*col. 5, lines 57-59*) and said second timer has a second parameter setting (*col. 6, lines 3-8*), and wherein; said controller is responsive to said computer for establishing said first and said second parameter settings (*col. 3, lines 40-44*).

Allowable Subject Matter

6. Claims 15-17 are allowed.

7. Claims 2 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, considered individually or in combination, fails to fairly show or suggest the claimed method of switching an automatic transfer switch between a first and second power sources comprising, among other limitations, novel and unobvious limitations of *"receiving a first control signal at a first timer in response to a below-threshold signal at a primary source; initiating a first time delay at a first timer in response to said first control signal; receiving a second control signal at a second timer from said controller; initiating a second time delay at a second timer in response to said second control signal"*, structurally and functionally interconnected with other limitations in a manner as recited in claims 15-17.

The limitations of *"a third timer disposed within said housing, said third timer having a third time delay; said switch responsive to said third timer; and wherein said*

third time delay is nested", structurally interconnected with other limitations in a manner as recited in the dependent claims 2 and 7, are also deemed to be novel and unobvious over the prior art of record.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schnackenberg et al (USP 6,172,432).

Dragos (USP 5,903,065).


Przywozny et al (USP 4,189,649).

University of Washington Engineering Services Facility Design Information, Automatic Transfer Switch, pages 1-11, August 2002.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



FRANK DUONG
PRIMARY EXAMINER

May 23, 2006